# Appendix B

## SPCC Draft

SCS ENGINEERS

# Spill Prevention Control and Countermeasure Plan (SPCC Plan)

Valley Park Facility
39 Old Elam Road
Valley Park, MO



Prepared for:

**St. Louis Composting, Inc.**
39 Old Elam Road
Valley Park, Missouri
(636) 861-5927

Prepared by:

**SCS ENGINEERS**
13 Executive Drive, Suite 1
Fairview Heights, IL
(618) 628-2001

October 2016
File No. 27213415.13

# Spill Prevention Control and Countermeasure Plan (SPCC Plan)

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39 Old Elam Road
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# MANAGEMENT REVIEW AND APPROVAL [112.5 & 112.7][1]

Name of Facility Valley Park Facility
39 Old Elam Road
Valley Park, Missouri 63088

Valley Park Facility, owned and operated by St. Louis Composting, Inc., is committed to preventing discharges of oil to the environment through implementation and regular review and amendment to the Plan and commitment of necessary resources to implement the measures described in this Plan. The Plan has the full approval of the Valley Park Facility Management [112.7].

Signature _____ Date _____
Name Tiffany Emmett
Title Safety and Compliance Manager

**The undersigned member of management has read and reviewed this Spill Prevention Control and Countermeasures Plan and determined that no changes[2] have been made to the site which affect the implementation of this Plan and that the contact names and phone numbers are current. [112.5]**

October 2017 _____

October 2018 _____

October 2019 _____

October 2020 _____



This Plan must be re-certified by a professional engineer when significant changes are implemented or after five (5) years, whichever occurs first.

1 The text in brackets [ ] references the applicable section of the SPCC regulation from the Code of Federal Regulations Title 40 CFR Part 112.

2 Significant changes may include but are not limited to: changes in the oil storage facility design: construction, operation, or maintenance that affects the potential for a release, changes in site drainage; the addition of additional storage or oil transfer points; reconstruction or movement of tanks; construction or demolition that might affect the secondary containment structures; reconstruction or additions to the piping system; or changes in products stored. Amendment of the Plan must occur no later than six (6) months following the change and implemented no later than six (6) months following the amendment.

# PROFESSIONAL ENGINEER CERTIFICATION [112.3(d)]

By means of this certification, the Professional Engineer affirms my representative has examined the St. Louis Composting, Inc. Valley Park Facility located at 39 Old Elam Road, Valley Park, Missouri and affirm that to the best of my knowledge, the information contained in this plan is true, complete, and accurate; and being familiar with the provisions of 40 CFR Part 112.1 through Part 112.8 affirm this Spill Prevention Control and Countermeasures (SPCC) Plan has been prepared in accordance with good engineering practice, including consideration of industry standards and local standard of care. Procedures for required inspection and documentation have been established and the SPCC Plan is adequate for the facility described herein. Such certification must in no way relieve the owner or operator of the facility of his duty to fully implement the SPCC Plan.



Renee D. Trenshaw, P.E.
SCS Engineers
Missouri License No. PE-2016003985

# CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION [112.20(e)]

Facility Name: Valley Park Facility
Facility Address: 39 Old Elam Road
Valley Park, Missouri 63088

1. Does the facility have a maximum storage capacity greater than or equal to 42,000 gallons AND do operations include over the water transfers of oil to or from vessels?
   ☐ Yes ☒ No

2. Does the facility have a maximum storage capacity greater than or equal to 1 million gallons AND does the facility lack secondary containment for each aboveground storage area that is sufficiently large to contain the capacity of the largest aboveground storage tank within the storage area?
   ☐ Yes ☒ No

3. Does the facility have a maximum storage capacity greater than or equal to 1 million gallons AND is the facility located at a distance (calculated using the EPA formula) at which a discharge from the facility could cause injury to an environmentally sensitive area as defined in Appendix III?
   ☐ Yes ☒ No

4. Does the facility have a maximum storage capacity greater than or equal to 1 million gallons AND is the facility located at a distance (calculated using the EPA formula) at which a discharge from the facility would shut down a public drinking water intake?
   ☐ Yes ☒ No

5. Does the facility have a maximum storage capacity greater than or equal to 1 million gallons AND has the facility experienced a reportable spill in an amount greater than or equal to 10,000 gallons within the last five years?
   ☐ Yes ☒ No



## CERTIFICATION

I certify under penalty of law that I am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____ Safety and Compliance Manager
Signature Title

Tiffany Emmett _____
Name Date

# SPCC PLAN REGULATORY CROSS REFERENCE CHART* [112.7]

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*Only the applicable portions of 40 CFR 112 is included, refer to full rule for additional information.

# 1 INTRODUCTION

The purpose of this Spill Prevention Control and Countermeasure (SPCC) Plan is to address the storage and management of oil and petroleum products at the Valley Park Facility, owned and operated by St. Louis Composting, Inc. (St. Louis Composting). This Plan is designed to fulfill the requirements of 40 CFR 112, U.S. Environmental Protection Agency (EPA) Oil Pollution Prevention Regulations. This Plan describes the facility's practices, procedures, structures, and equipment to prevention spills and mitigate or preclude adverse impacts on the environment.

## 1.1 LOCATION OF THE SPCC PLAN [112.3(e)]

A complete copy of this SPCC Plan is available in the St. Louis Composting, Inc. office at 39 Old Elam Road in Valley Park, Missouri. This Plan will be made available to the EPA regional Administrator and his/her agents, upon request, for onsite review during normal working hours.

## 1.2 PLAN REVIEW AND AMENDMENT [112.5]

This SPCC Plan will be amended for any of the following reasons:

- When required by the EPA Regional Administrator (40 CFR 112). Required amendments must be implemented as soon as possible, but not later than six (6) months after the change occurs. A Professional Engineer must certify technical amendments to the plan, including the relocated of tanks.

- Amend this Plan within six (6) months whenever there is a change that materially affects the facility's spill potential. This includes changes in facility design, construction, operation, or maintenance. The revised Plan must be recertified by a Professional Engineer.

- During the annual review, update the Plan to reflect any administrative changes that are applicable, such as phone numbers. Completion of this review will be documented by completion of the bottom portion of the Management Approval (page iii).

- At least once every five (5) years the plan will be reviewed and amended. Amendments must be recertified by a Professional Engineer.

## 1.3 SUMMARY OF PLAN REQUIREMENTS

The summary of actions the Valley Park Facility must perform to comply with the SPCC rule include the following:

- Complete monthly and annual site inspections. Inspections are described in Section 4.2 including inspection checklists, example forms found in Appendix A.

- Perform preventative maintenance of equipment, secondary containment systems, and discharge prevention systems as needed to keep them in proper operating condition (Section 4.6).

- Conduct annual employee training as outlined in the Training section of the plan (Section 4.5) and document training on a log (example included in Appendix A).

- If either of the following occurs, submit the Plan to the EPA Region 7 regional administrator and the Missouri Department of Natural Resources (MDNR), along with other information as detailed in Section 5 and Appendix B.

  - ❖ The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the U.S. or adjoining shorelines in a single spill event; or

  - ❖ The facility discharges oil in quantity greater than 42 gallons in each of two spill events within any 12-month period.

- Conduct reviews of this Plan as discussed in Section 1.2.

- Conform with facility modifications as discussed in Section 1.4.

## 1.4 MODIFICATIONS REQUIRED TO COMPLY WITH PLAN [112.7(a)(1), 112.8(c)(8)]

This plan has been written as if the following modifications have already been implemented. The following are facility modifications required to comply with this SPCC Plan.

- Store fuel dispenser nozzles in appropriate manner when not in use.
- Keep secondary containment drain valves locked.

# 2 Facility Description [112.7(a)(3)]

## 2.1 GENERAL

| | |
|---|---|
| Company Name: | St. Louis Composting, Inc. |
| Mailing Address: | 39 Old Elam Road<br>Valley Park, Missouri 63088 |
| Site Address: | 39 Old Elam Road<br>Valley Park, Missouri 63088 |
| Telephone: | (636) 861-5927 |
| Location: | From Interstate 44, take Highway 141 north. Take the first left off of Highway 141 turning west onto Old Elam Road. St. Louis Composting will be on the right. |
| President: | Patrick Geraty |
| Vice President of Operations: | Dave Gavlick |
| Safety and Compliance Manager: | Tiffany Emmett |
| Operating Hours: | Monday-Friday: 6am-5pm<br>Saturday: 7am-3pm<br>Sunday: As needed |
| Employees: | Approximately 22 |
| Facilities: | The Valley Park Facility (facility) is used for composting, wood chipping yard waste material, coloring mulch, and retail sales. Facility vehicles are fueled from aboveground storage tanks (ASTs) located in various operational areas on site. Vehicle and equipment maintenance occurs outside near the Lubricating Station and Storage Locker #3. Heavy equipment for compost operations is parked and stored onsite. There is a finished product area for compost or mulch; a retail area for compost, soil, and mulch; and office buildings at the Facility. |

The site location and surrounding area is shown on **Figure 1** Site Location and **Figure 2** Site Layout.

## 2.2 DESCRIPTION OF SITE AREA

Valley Park is an outer southwestern suburb of St. Louis, Missouri with an estimated population of approximately 7,000. The St. Louis Composting facility is centrally located in Valley Park, St. Louis County, Missouri. The area around the facility is mostly urban with a mix of industrial, residential, and commercial developments. The area surrounding the site is shown on **Figure 1**.

See **Appendix G** for pictures of the site area.

## 2.3 OPERATIONS

St. Louis Composting operates heavy equipment necessary to transport, mix, grind, and dye wood chips and compost. This equipment is normally operated around the designated compost and wood chip areas and is fueled by diesel ASTs located at the Wood Chip Grinding Area, Fueling Station, and Wood Chip Colorant Area. Light maintenance for heavy equipment is performed onsite near the Lubricating Station and Storage Locker #3. During operating hours, numerous dump trucks and residential vehicles are on site to load and unload materials used in wood chipping and composting operations.

The following is a general summary of oil materials stored and used at the St. Louis Composting that are regulated under provisions of 40 CFR Part 112. This includes materials stored in tanks and drums (bulk storage containers).

- **Diesel fuel** is used to fuel facility vehicles and equipment and power onsite generators.
- **Lubricating fluids** (motor oil, gear oil, grease etc.) are used in facility vehicles and heavy equipment.
- **Hydraulic fluids** (brake fluid, etc.) are used in facility vehicles and heavy equipment.
- **Waste motor oil and hydraulic oils** are stored onsite prior to collection for disposal or recycling.



## 2.4 WATER SUPPLY

Potable water is provided to the site by the Missouri American Water Company located in St. Louis, Missouri.

Two wells are located on site to provide water for the water trucks and colorant machines. These are labeled as well houses and the locations of can be found on **Figure 2**.

## 2.5 WASTEWATER DISCHARGES

Wastewater and residual petroleum generated from the cleaning of the used ASTs is collected and disposed of offsite by a private disposal company.

Fleet vehicles are not washed onsite, but are taken to a truck stop located off-site for washing. No wash-water is generated on site.

Sanitary wastewater is discharged into the public sanitary sewer system available to the facility. Sanitary wastewater services are provided by the Metropolitan St. Louis Sewer District (MSD).

## 2.6 STORM WATER DISCHARGES

General storm water drainage paths are shown on **Figure 2**. Surface water runoff from the site will generally flow towards two grass-lined drainage channels that flow from south to north at the west end of the site and from east to west along the haul road separating the composting and wood chipping areas. The channels along the southern end of the Facility divert runoff directly to Outfall #001. The channels along the northern end of the site flow divert runoff directly to Outfall#002. There is a culvert that allows water from the Wood Chip Colorant area to enter the channel for Outfall #002. Outfall #001 and Outfall #002 discharge to a private lake, which discharges into the nearby Meramec River.

In the event of a spill from any location onsite, the spill material will flow towards the drainage channels as detailed in **Figure 2**. Filter socks are placed up-gradient of the channels to help reduce the amount of potential debris that may enter the channel.

Should a spill occur, oil absorbent socks (or other suitable material) will be placed in the path of spill to prevent the spill from leaving the site. Additional barriers will be provided if necessary using onsite equipment and woodchip fines / soil to mitigate the spill. Should the contents of the spill exit Outfall #001 or Outfall #002 it will first enter the private lake before entering into the downstream river.

Storm water discharges from the facility are regulated by the Missouri Department of Natural Resources (MDNR) General Permit for storm water discharge for yard waste composting facilities under 20 acres (MO-G970035). The current permit for the facility has two outfalls. Management of storm water is discussed in the facility's Storm Water Pollution Prevent Plan (SWPPP). In the event a discharge occurs records utilized for the MDNR General Permit and SWPPP may be utilized for SPCC reporting requirements.

# 3 POTENTIAL RELEASE SOURCES AND CONTAINMENT

## 3.1 RECENT SPILL HISTORY

During its history, St. Louis Composting has had no reportable releases of oil products at the Valley Park site.

## 3.2 POTENTIAL RELEASE SOURCES AT THE FACILITY AND CONTAINMENT [112.7(c), 112.7(a)(3)(ii), 112.8(b), 112.8(c), 112.8(c)(3), 112.8(c)(11), 112.8(d)]

Potential sources of a spill event are summarized below. **Figure 2** shows the location of each oil source and storage area. An inventory of oil products and a summary of ASTs are presented in **Table 1** at the end of this section. **Table 2** summarizes potential discharge volumes and direction of flow. **Appendix F** contains site photos of the containers discussed below. According to a Phase 1 Environmental Assessment completed for the site by NPN Environmental Engineers, Inc. in July 1994 there was no evidence present of underground storage tanks located on the property.



1. **New Incoming Oil**

   Bulk oil and fuel is delivered to the facility in tanker trucks by a third party company; the current company being utilized is Moore Oil Company (Moore). Moore is contracted by St. Louis Composting to fill the diesel ASTs twice a week, other tanks at the site that hold transmission fuel, engine oil, and hydraulic oil are filled on an as-needed basis.

   While fueling occurs, drivers are instructed to use extreme caution when filling tanks. The driver must remain with the nozzle and observe the site gauge during the entire fueling process and must avoid distractions that could lead to inattention. Two men may be required to monitor the incoming oil quantity if the sight gauge is not visible/legible from the truck's control shutoff.

   All Moore trucks are equipped with spill kits to respond to small spills. All trucks have certified gauges so the driver is aware how much fuel has been dispensed into the receiving tank. Trucks are equipped with emergency shut off levers that are annually inspected by the Missouri Department of Transportation (DOT), in case of an incident. Tanks are never filled completely, so fuel expansion will not result in a discharge of petroleum product. Drivers are required to report any equipment malfunctions to Moore and St. Louis Composting immediately to obtain repairs. Trucks are equipped with DOT approved fire extinguishers for immediate response in an emergency. In addition, each truck has the emergency response number to call in the event of a major fuel spill.

   Releases of minor spills during fuel transfer will be controlled by drip pans. Cleanup of small spills can be accomplished by recovering the oil from the drip pans and using absorbent material to recover oil spilled on the pavement or ground. Absorbent materials are located in the facility's spill kits and in Moore's spill kit.

A larger release (100+ gallons), although unlikely, could occur due to a failed hose connection or tank overfill. Fuel released at any location in the facility would ultimately have overland flow to the perimeter ditches then follow the ditches to Outfall #001 or Outfall #002 located at the west side of the site, south of the Wood Chip Grinding Area. Large spills can be controlled by placing oil absorbents around the spill and at downstream locations. The potential for a release and the size of the release is controlled by constant attention to the transfer hose and fueling operation by the truck operator.

**2. Aboveground Storage Tanks**

Two 560-gallon diesel tanks are located at the Fueling Station. Each tank has enclosed secondary containment adequate to store full tank contents and protect the contents from exposure to rainwater. Each tank has a site gauge and a fuel port to transfer into the tank using a nozzle. Incoming bulk fuel is transfer into the tank through the fuel port by a dispenser. Fuel is transferred out of the tank using a pump and fuel nozzle. Any release would be contained within the tank's outer shell until transferred out by use of a pump.

The 200-gallon used oil tank is located inside the lubricating station. The tank is a single-walled tank placed in a steel secondary containment tub (approximately 270 gallons) and located inside the Lubricating Station. The tank has a fill port on top and bulk incoming oil is manually transferred using a nozzle. The used oil is hauled off by a third party for proper recycling or disposal. Visual observation and caution is used to not overfill the tank. Any spill captured within the secondary containment structure is to be properly drained out of the structure through the drain valve located on the bottom of the containment structure or pumped out.

The 350-gallon hydraulic fluid tank located inside Storage Locker #3 is a dual-walled tank. The AST has a fuel port on top for bulk incoming oil to be pumped in using a dispenser. There is a pump dispenser for the outgoing oil. A release from the tank would be contained in the tank's secondary containment.

The 175-gallon diesel tank is located at the Wood Chip Colorant / Water Truck Area and used to power the generators in the well houses. The tank is dual-walled to provide secondary containment and has a built-in covered drip pan for bulk incoming fuel and a sight gauge. Incoming fuel is pumped in using a dispenser. There is a pump and dispenser for outgoing oil. Any release from the tank would be contained within the tank's outer shell until transferred by use of a pump.

The 517-gallon diesel tank located at the Wood Chip Grinding Area is a dual-walled tank within a containment structure. The tank has a fuel port and site gauge on top of the tank. Incoming fuel is pumped in using a dispenser. There is a pump and dispenser for outgoing oil. Any release would be contained within the tank's outer shell until proper disposal.

The mobile 560-gallon trailer-mounted diesel tank is normally located at the Wood Chip Grinding Area on a flat trailer and use to fuel equipment. The tank has enclosed

secondary containment. Incoming fuel is pumped in using a dispenser. There is a pump and dispenser for outgoing oil. Any release from the tank would be contained within the tank's outer shell until transferred by use of a pump. Should a major spill occur, wood fines located all around the site would be utilized to contain the spill.

Any fuel removed from the interstitial space or from the tank's secondary containment structure of the dual-walled tanks shall be properly used or recycled as directed by the Safety and Compliance Manager or designated representative.

**3. AST Transfer Hoses**

The transfer of oil from the bulk storage occurs with hoses between the diesel ASTs and the equipment being fueled. The hose is attached to a manual fill nozzle dispenser. Aboveground hoses shall only transfer material while under supervision of a trained employee. Should a leak or spill occur from the hoses the material transfer shall be ceased, and the spill shall be cleaned up with oil absorbents located in the spill kits.

**4. Drums and Small Containers**

Drums and multiple small oil containers (5 gallons or less) are stored on site inside the Lubricating Station and/or Storage Locker #3. Various oils and greases are used for vehicle and equipment maintenance.

**5. Generators**

The Facility utilizes three generators at the facility to provide power for various equipment. One uses the previously discussed 175-gallon tank in the Wood Chip Colorant / Water Truck Area. The other two have dedicated tanks. The first is a diesel generator in the colorant area has a fuel capacity of 200-gallons (104 CAT generator). This container is double walled and has a level indicator to prevent over filling. The second diesel generator in the wood chip grinding area has a fuel capacity of 150-gallons (102 CK80DM generator). Fuel is pumped into the generators as-needed to power the generators.

**6. Heavy Equipment**

The #512 and #513 Grinders each have 250-gallon on-board diesel fuel tanks used to power the equipment and generally used in the Wood Chip Grinding Area and the Composting, Processing and Log Storage Area, respectively.

The 417 McCloskey 621 R Trommel screener has a 65-gallon on-board diesel fuel tank and is used to power the equipment in the Composting, Processing and Log Storage Area.

Other equipment on site such as loaders, dump trucks, turners, etc. are located at various locations around the site during the day. Any of this equipment has the potential for leaking oil, diesel fuel, transmission fluid, or hydraulic oil at any time. Should a spill occur, it should be small to moderate and can be cleaned up with absorbent socks or wood fines located at numerous locations around the site. Waste materials shall be stored in 55-gallon drums until proper disposal can take place.

**Table 1: Aboveground Storage Tank Summary**
[112.7 (a)(3)(i)]

| Tank Name/ Number | Location | Contents | Capacity (gallons) | Year Installed | Secondary Containment |
|---|---|---|---|---|---|
| **LUBRICATING STATION** | | | | | |
| Used Oil | Inside | Used Oil | 200 | 2003 | Indoor, Steel tub |
| **WOOD CHIP GRINDING AREA** | | | | | |
| Diesel Fuel | Outside | Diesel Fuel | 517 | 2008 | Dual-walled |
| Diesel (Mobile) | Outside | Diesel Fuel | 560 | 2008 | Enclosed Steel Containment Structure |
| 102 CK80DM Generator | Outside | Diesel Fuel | 150 | 2008 | Dual-walled |
| #512 Grinder (on-board tank) | Outside | Diesel Fuel | 250 | 2008 | Dual-walled |
| **FUELING STATION** | | | | | |
| Diesel Fuel | Outside | Diesel Fuel | 560 | 2003 | Enclosed Steel Containment Structure |
| Diesel Fuel | Outside | Diesel Fuel | 560 | 2009 | Enclosed Steel Containment Structure |
| **STORAGE LOCKER #3** | | | | | |
| Hydraulic Fluid | Inside | Hydraulic Fluid | 350 | 2003 | Indoor, Dual-walled |
| **COLORANT AREA / WATER TRUCK AREA** | | | | | |
| Diesel Fuel (Generator for Well Houses) | Outside | Diesel Fuel | 175 | 2014 | Dual-walled |
| 104 Cat Generator | Outside | Diesel Fuel | 200 | 2014 | Dual-walled |
| **COMPOSTING, PROCESSING, AND LOG STORAGE AREA** | | | | | |
| #513 Grinder (on-board tank) | Outside | Diesel Fuel | 250 | 2007 | Dual-walled |
| 417 McCloskey 621 R Trommel (on-board tank) | Outside | Diesel Fuel | 65 | 2013 | Dual-walled |



Note:

1. The cumulative total of petroleum products stored in various containers in the storage building and at the Lubricating Station and Fueling Station is estimated from site visit on 4/7/2016.

## Table 2: Potential Outdoor Discharge Volume and Direction of Flow [112.7 (b)]

| Location | Potential Event | Maximum Release Volume (gallons) | Maximum Discharge Rate | Direction of Flow |
|---|---|---|---|---|
| Lubricating Area | Failure of Tank | 200 | Gradual to instantaneous | Secondary containment, then building floor, then overland flow to the west |
| | Tank Overfill | 10 | Gradual to instantaneous | |
| Wood Chip Grinding Area | Failure of Tank | 560 | Gradual to instantaneous | Secondary containment, then overland flow to the east-southeast |
| | Tank overfill / Hose leak during transfer | 60 | 15 gal/min | Overland flow to the east-southeast |
| | Tank truck leak or failure | 7,500 (varies on truck size) | Gradual to instantaneous | |
| Fueling Station | Failure of Tank | 560 | Gradual to instantaneous | Secondary containment, then overland flow to the west |
| | Tank overfill / Hose leak during transfer | 60 | 15 gal/min | Overland flow to the west |
| | Tank truck leak or failure | 7,500 (varies on truck size) | Gradual to instantaneous | |
| Storage Locker #3 | Failure of Tank | 350 | Gradual to instantaneous | Secondary containment, then building floor, overland flow to the west |
| | Tank overfill / Hose leak during transfer | 60 | 15 gal/min | Building floor, then overland flow to the west |
| | Tank truck leak or failure | 7,500 (varies on truck size) | Gradual to instantaneous | |
| Colorant Area / Water Truck Area | Failure of Tank | 200 | Gradual to instantaneous | Secondary containment, then overland flow to the south-southeast |
| | Tank overfill / Hose leak during transfer | 60 | 15 gal/min | Overland flow to the south-southeast |
| | Tank truck leak or failure | 7,500 (varies on truck size) | Gradual to instantaneous | |
| Composting, Processing, and Log Storage Area | Failure of Tank | 250 | Gradual to instantaneous | Secondary containment, then overland flow to the west |
| | Tank overfill / Hose leak during transfer | 60 | 15 gal/min | Overland flow to the west |
| | Tank truck leak or failure | 7,500 (varies on truck size) | Gradual to instantaneous | |

# 4 DISCHARGE PREVENTION

## 4.1 PRODUCT UNLOADING PROCEDURES [112.7(a)(3) (ii)]

Tank truck drivers loading or unloading material at the facility shall abide by the following guidelines:

1. Exercise caution when maneuvering to avoid damage to containment structures.
2. Chock the truck wheels before beginning fuel transfer.
3. Inspect tank, fittings, and liquid level indicator prior to filling each tank to verify product has sufficient free capacity.
4. Verify that all drain valves are closed before disconnecting loading/unloading lines, if any.
5. Place drip pans under all pump hose fittings or connections, if any, prior to loading/unloading.
6. Remain with the vehicle at all times while loading/unloading to visually monitor product level throughout the transfer operation.
7. Drain the loading/unloading lines to the storage tank and close the drain valves before disconnecting said lines. Make sure a drip pan or other appropriate containment device is located under all connections, if any.
8. Inspect the vehicle before departure to be sure all loading/unloading lines have been disconnected and all drain and vent valves are closed.
9. Immediately report any leakage or spillage, including quantity, to the SPCC Coordinator(s) or other management personnel.

Tank truck drivers shall be notified of these instructions. A sample Notice to Tank Truck Drivers is located in Appendix E.



## 4.2 INSPECTIONS [112.7(e), 112.8(c)(6), 112.8(b), 112.8(c)(10)]

Monthly and annual inspections shall be documented. A written record of the inspection, signed by the Safety and Compliance Manager, shall be kept on file for a minimum of three years. Appendix A contains forms that may be used for recording inspections. If a problem is detected during the inspection, the Safety and Compliance Manager should be immediately notified and the appropriate action initiated.

All ASTs (including totes and drums) containing oil or hazardous substances shall be examined visually for condition and the need for maintenance on a monthly basis by an owner's inspector

who is familiar with the site and can identify changes and developing problems. The visual inspection will include the following items:

1. Containment structures and areas surrounding tanks, drums, totes, and storage areas should be checked for water, debris, fire hazards, and vegetation.
2. Drain valves should be operable and in a closed and locked position. Drainage paths should be clear.
3. Liquid level gauges should be readable and in good condition.
4. The outside of the containers shall be observed for visible signs of leakage around the tank, concrete pad, and containment structure.
5. Portable containers should be in designated storage areas.
6. The portable containers should also be checked for buckling, denting, bulging, or distortions.
7. All aboveground valves and hoses shall be examined for general condition of items such as supports, flange joints, expansion joints, valve glands and bodies, locking mechanisms, metal surfaces, and drip pans.

The secondary containment structures onsite are either dual-walled, enclosed, and/or our under roof preventing storm water from entering the secondary containment structure. In the unlikely event that storm water accumulates in a containment structure, it must be removed only after inspection for the presence of oil (sheen, odor) and may only be discharged if no presence of oil is found. Records of the inspection of the accumulated water and the discharge should be documented on the Rainwater Discharge Reporting Form found in Appendix A [112.8 (b)(1) and 112.8 (b)(2)]



All visible oil discharges must be promptly corrected, including those from seams, gaskets, piping, pumps, valves, rivets and bolts. Any accumulation of oil in diked areas must be promptly removed. [112.8 (c)(10)]

Additional items must be checked on an annual basis. Those items are as follows:

1. The container shell and associated piping, valves, and pumps should be inspected for failure.
2. Earthen berms should be checked for holes, washout and cracking. Integrity of containment walls shall be verified.
3. Absence of washout, settling and cracking of steel containment structures and above ground foundation and tank structural supports should be verified.
4. All vents should be free of obstructions and operable.

5. Electrical equipment associated with the containers and the fueling areas, such as lights, should be checked for proper operation.

St. Louis Composting, Inc. maintains the ASTs in accordance with the Steel Tank Institute (STI) Standard for the Inspection of Aboveground Storage Tanks (SP001), 5th edition. Under SP001, tanks are assigned to one of three categories. The categories are determined by the individual tank's available spill control and continuous release detection method (CRDM). The tank category with the tank size is used to determine the inspection frequency. Visual inspections of tanks, secondary containment structures, and associated piping and components are conducted in accordance with this plan. All tanks and drums will be replaced or repaired as needed in accordance with STI SP001.

All the tanks at the facility are less than 1,100 gallons and with a secondary containment acting as spill control and operational procedures acting as CRDM. Therefore, each of the aboveground storage tanks fall into the Class 1 category under STI SP001. Therefore, the inspections required are monthly visual inspections by facility personnel but no formal inspections by an STI SP001 certified inspector. Facility personnel completing inspection should be knowledgeable of the tank, operations, and contents.

The drums are considered a portable container. Portable containers are all required to have monthly visual inspections but no formal inspections by an STI SP001 certified inspector. The drums will be replaced/repaired as needed or required.

## 4.3 SECURITY [112.7(g)]

Security procedures at this facility have been implemented to prevent oil spills due to unauthorized entry and vandalism to the facility. Access to the buildings is limited to authorized personnel only during business hours. The buildings are locked during non-business hours. The facility is secured during non-business hours through the use of a locked gate located at the site's only entrance. Large earthern/wooden berms approximately four to eight feet in height surround the remaining sides of the facility. The berms, although not fencing, are adequate for this facility due to the location and inaccessibility except by hiking through difficult terrain.

Valves are closed and locked. Pump motors are controlled by a locking system to prevent unauthorized operation of the motor starters. After the facility has closed for the day, the security of the tanks is checked (i.e. to verify all appropriate tank equipment and buildings/lockers have been locked and secured).

Lighting commensurate with the type and location of the facility is required around the areas with outdoor ASTs to assist in the discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel; and to aid in the prevention of discharges occurring through acts of vandalism. Currently St. Louis Composting has motion-sensored floodlights at the entrance of the site that provides lighting to the outdoor ASTs around the Fueling Station.

## 4.4 OVERFILL PREVENTION SYSTEMS [112.8(c)(8)]

All tanks will be equipped with an overfill prevention system to minimize the possibility of a release to the environment. The following systems are acceptable in accordance with good engineering practice:

1. High liquid level alarm with an audible or visual signal,
2. High liquid level pump cutoff device set to stop flow at a predetermined container content level, or
3. A fast response system for determining the liquid level of each container, such as direct vision gauges with continuous oversight during filling.

The tanks located at the St. Louis Composting facility generally utilize direct vision gauges. Direct vision gauges are a fast response system for determining the liquid level of each container. As direct vision gauges are utilized at the site, two people are required for all fluid and fuel transfer operations.

The tanks located at the St. Louis Composting may also use the high liquid level pump cutoff device set, such as fueling equipment and generators.

All oil storage containers will use the following procedure to avoid discharges during filling activities:

1. Verify that all valves used to control drainage from the secondary containment are closed.
2. Verify that the container that will receive the product has sufficient free capacity.
3. Visually monitor the product level during the transfer operation.



## 4.5 TRAINING [112.7(f)]

New employees are provided with an instruction session covering applicable laws, rules and regulations within 30 days of hire regarding general facility operations. Also within 30 days of hire, vehicle and equipment maintenance personnel are provided with instructions on procedures to prevent spills and remedial actions to be taken in the event of a spill. An annual review of pertinent rules and procedures for spill prevention and containment is held for maintenance personnel. Employees receive continued on-the-job training instructions regarding spill prevention and control.

Employees will receive a review of the intent and requirements of the SPCC Plan on a yearly basis. Interim reviews will be conducted as needed to explain modifications to the SPCC Plan that may be made to accommodate new circumstances.

Employees will sign a training roster stating they have attended the SPCC training, understand the rules and regulations, and agree to abide by these guidelines. Employee training documents can be found in **Appendix A**. Training records will be maintained for a minimum of three (3) years.

## 4.6 PREVENTATIVE MAINTENANCE AND HOUSEKEEPING

1. Store hoses, pumps, and other equipment in appropriate manner. Secure and lock/turn-off power to pumps and secure the facility at the end of business hours.
2. Drip pans shall be inspected for liquid levels and checked prior to each use. The drip pans shall be emptied as needed into the used oil tote designated for use in the used-oil furnace.
3. Drip drums are used to collect potential leaks during the petroleum product loading and unloading from ASTs which are located in the tank farms within the secondary containments. The drip drums are emptied as needed into the used petroleum tote designated for use in the waste-oil furnace.
4. Spilled oil or impacted pavement is immediately cleaned up, and the spilled materials are disposed of properly.
5. Spill kits are kept throughout the Facility near the tanks to readily absorb spilled petroleum products which are then disposed of properly off-site.
6. The drainage ditch which surrounds the eastern, southern, and western sides of the Facility should be periodically inspected for debris, trash, and for oily sheens on the surface water when storm water is in the drainage ditch. If oil sheen is observed on the surface water in the drainage ditch, immediate measures should be taken to assess the source of the oil sheen and immediate remediation measures taken to remove the oil sheen from the drainage ditch.
7. Weekly visual inspections of the filter socks which are placed around the yard drain should be conducted for signs of petroleum staining and the physical condition of the booms. Signs of petroleum staining or deterioration warrant immediate replacement. Documentation of the weekly visual inspections should be conducted and documented in accordance with the facility's SWPPP.

# 5 DISCHARGE RESPONSE PROCEDURES [112.7(a)(5)]

## 5.1 REPORTABLE RELEASE DEFINITION [112.7(j)]

EPA regulations define a release event as **the discharge of oil into, or upon, the navigable waters of the United States or adjoining shorelines, in harmful quantities.** Harmful quantities are defined as a discharge that **violates the applicable water quality standards or causes a sheen upon, or discoloration of, the surface of the water of the adjoining shorelines. Storm sewers are considered to fall under the definition of a "navigable waterway" since most storm sewers discharge into a navigable waterway.**

If the **release meets any one** of the following criteria, the release **SHALL** be reported to the Missouri Department of Natural Resource (MDNR) at 573-634-2436 at the earliest practical moment upon discovery of a release (within 24 hours). Additional contact information is provided in Section 4.3 and Appendices C and E.

- 25 gallons or more of petroleum product is spilled on the ground surface.
- Any volume of petroleum product reaches, or is a threat to reach, any waterway (a waterway is generally defined as a storm sewer, storm water detention basin, ditch, creek, lake, river, groundwater, etc.).
- There is a threat of a release that meets the limits defined above.

Releases of less than 25 gallons of oil product, which have been stopped and are easily cleaned up with absorbent material, DO NOT require reporting. Releases that are completely contained within a secondary containment structure DO NOT require reporting. However, if in doubt, contact the solid waste superintendent or designee for guidance.



## 5.2 ACTIVATION OF THE RESPONSE PLAN [112.7(a)(3)(iii), 112.7(a)(3)(iv), 112.7(a)(3)(vi), 112.7(a)(4)]

The response procedures outlined in **Appendix F** and the flow chart in **Appendix D** will be initiated when any of the following occur:

1. A reportable release as defined in Section 5.1 occurs,
2. The source of the release cannot be stopped, or
3. The reasonable threat of a fire is present.

In the event of an accident or spill, the Safety and Compliance Manager or designee shall contact the individuals listed below as soon as practical after the incident has occurred. Notification of the Safety and Compliance Manager is required. Contact preference is in the order listed. If a

spill discharge to surface waters is imminent, the regulatory emergency agencies should be notified immediately as described below.

### 5.2.1 Internal Chain of Command

The following is a current list of personnel in the order which they will assume responsibility. In the event that the Spill Coordinator is not immediately available, one of the individuals on the list will assume responsibility until the Spill Coordinator arrives or the response contractor arrives.

**ST. LOUIS COMPOSTING, INC. EMERGENCY RESPONSE CONTACTS**

| Title/Names | Phone Number |
|---|---|
| Tiffany Emmett<br>Safety and Compliance Manager* | (636) 861-3344 (Office)<br>(636) 299-6022 (Mobile) |
| David Gavlick<br>Vice President of Operations | (636) 861-3344 (Office)<br>(314) 575-7887 (Mobile) |

** The St. Louis Composting, Inc. Safety and Compliance Manager shall be notified of any spill event.*

Each of the above individuals is thoroughly familiar with the facility layout and this SPCC Plan. The Safety and Compliance Manager is onsite most workdays during normal business hours and is on call at all times. During limited times when the Spill Coordinator is not available or is out of town, the Vice President of Operations or alternate will be designated to temporarily assume the Safety and Compliance Manager's responsibility.

The Emergency Reporting Roster, which describes the type of emergency and who to contact for immediate notification and response, is posted on bulletin boards at the facility. This information is communicated to new employees during new employee orientation.

### 5.2.2 External Emergency Contacts

In the event of a spill or release, contact St. Louis Composing, Inc.'s Safety and Compliance Manager Tiffany Emmett to confirm if reporting is necessary. A release shall be reported to the following:

| | |
|---|---|
| St. Louis County Office of Emergency Management | (314) 628-5400 |
| MDNR Emergency Spill Line (24-hour line for spills or releases) | (573) 634-2436 |
| National Response Center | (800) 424-8802 |
| Valley Park Fire Department | (636) 225-4288 or 911 |

## 5.3 DUTIES AND RESPONSIBILITIES

The employee discovering the release will act as the Spill Coordinator until one of the company emergency contacts is contacted by telephone or a local emergency response official assumes control. The employee discovering the release or the first employee on site is to follow the Safety and Compliance Manger's phone instructions until the Safety and Compliance Manager physically arrives on the scene. Once the Safety and Compliance Manager arrives, the responding employee will update the Safety and Compliance Manger on the status of the response activities, work in conjunction with the Safety and Compliance Manager throughout the emergency response, and provide support where necessary.

### 5.3.1 Safety and Compliance Manager

The Safety and Compliance Manager is responsible for assessing possible hazards to health and the environment until the environmental response contractor arrives on site. The Safety and Compliance Manager is also responsible for assessing the incident hazards by utilizing the Safety Data Sheet (SDS) for the specific spilled material. If a SDS is not available for the material, other information that can safely be obtained from container labels, Department of Transportation (DOT) placards, manifests, and/or bills of lading will be used.

The Safety and Compliance Manager is assisted by facility personnel and, if needed, local contractors who can immediately deploy a crew and equipment to the facility and immediately initiate spill response procedures. Additional duties of the Safety and Compliance Manager will include:

- Direct emergency response activities;
- Identify the nature, cause, and extent of the emergency;
- Oversee and manage the response activities of both site personnel and the emergency response contractor or first responders;
- Identify the source, quantity, and extent of released material;
- Assess the hazards to human health and/or environment and consider the properties of gases, surface runoffs, or runoffs aggravated by water or chemical agents used to control fire or explosions;
- Confirm local responders have been notified;
- Assure the proper containment, storage, treatment, and/or disposal of recovered materials resulting from the emergency response activities (i.e. contaminated soil, surface water, contaminated clothing, or any other material that results from the emergency); and
- Assure no materials are stored in close proximity to released materials which are being cleaned up or packaged for off-site disposal.

### 5.3.2 Employees

If the site has a release, fire, or explosion which requires outside assistance or could threaten human health or the environment outside of the facility, the employee discovering the release shall immediately notify the Safety and Compliance Manager, who will then notify local police,

fire departments, and the local emergency response firm. A list of the emergency telephone numbers is included in **Appendix C**. Additional duties of employees will include:

- Notify supervisory personnel of any unusual activities, spills, safety hazards, or procedural violations observed;
- Follow the petroleum release response procedures (**Appendix F**), including assigned responsibilities for assuring the safety of the general public;
- Continue normally assigned duties and remain on stand-by alert for further instructions from Spill Coordinator if the evacuation procedures have not been implemented; and
- Refer media and general public inquiries to the Safety and Compliance Manager, Tiffany Emmett.

# 6 CONTROL AND CONTAINMENT EQUIPMENT

In addition to safety response equipment, such as fire extinguishers located around the facility, the following sections discuss spill response and control items.

## 6.1 SPILL KITS

The Facility has spill kits which contains an oil absorbent material. A large spill kit is located near the Fueling Station with smaller portable spill kits (5-gallon bucket sizes) are kept near each of the other tanks. The oil absorbent material is spread directly on oil spills. The Safety and Compliance Manager keeps a sufficient amount of oil absorbent material at the facility. Oil absorbent materials may include cat litter, Oil-dri®, and oil sorbent pads or blankets. Additionally, mulch site equipment may be used to act as a barrier in case of a spill event at the facility.

## 6.2 OIL ABSORBENT SOCKS

The Facility uses oil absorbent socks which will absorb oil but not water. The oil absorbent socks are stored in spill kits located throughout the property. When being used, the oil absorbent socks are to be placed around a spill to retain oil and prevent oil from entering into the storm water drain. The Safety and Compliance Manager maintains an adequate supply of the oil absorbent socks at the facility, and inspects the stock of the absorbent socks during routine monthly inspections.

## 6.3 RESPONSE EQUIPMENT

The facility has small hand tools, such as shovels and brooms, which may be used for spill response efforts. These tools are kept in the spill kits or with the other tools on site. Additionally, the Facility uses large equipment such as trucks and loaders for routine composting operations. This equipment may be used to move wood fines or soil to block drainage routes of spills, if needed for larger spills.

## 6.4 DISPOSAL

Any oil laden material shall be collected in drums, or some other compatible container which will not allow the oil to leak. Under no circumstances is this material to be disposed without the prior approval of the Safety and Compliance Manager. Following this procedure will ensure that no environmental regulations regarding oil disposal are violated.

a. Disposal of oils will be through the used oil contractor or the vacuum truck service. Oils shall be transported to a facility where they are available for recycling by re-refining or supplemental fuels programs.
b. Disposal of any materials which are categorized as hazardous wastes. A hazardous waste disposal contractor shall be hired to manage disposal/ recycling of any hazardous waste in accordance with all applicable Federal, State and local regulations.
c. Non-hazardous materials should be recycled. If recycling is not available, materials which meet landfill disposal criteria maybe disposed by land filling.

# APPENDIX A

## Inspection Forms and Documentation

- Monthly Inspection Checklist (STI SP001)
- Portable Container Monthly Inspection Checklist (STI SP001)
- Annual Inspection Checklist (STI SP001)
- Rainwater Discharge Report Form
- Personnel Training Record

# STI SP001 Monthly Inspection Checklist

**General Inspection Information:**

Inspection Date: _____ Retain Until Date: _____ (36 months from inspection date)

Prior Inspection Date: _____ Inspector Name: _____

Tanks Inspected (ID #'s): _____

**Inspection Guidance:**

- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly or take other corrective action. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.
- **In the event of severe weather (snow, ice, wind storms) or maintenance (such as painting) that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required as soon as the equipment is safely accessible after the event.**

| Item | Task | Status | Comments |
|---|---|---|---|
| **1.0 Tank Containment** | | | |
| 1.1 Containment structure | Check for water, debris, cracks or fire hazard | □Yes* □No □N/A | |
| 1.2 Primary tank | Check for water | □Yes* □No | |
| 1.3 Containment drain valves | Operable and in a closed position | □Yes □No* □N/A | |
| 1.4 Pathways and entry | Clear and gates/doors operable | □Yes □No* □N/A | |
| **2.0 Leak Detection** | | | |
| 2.1 Tank | Visible signs of leakage | □Yes* □No | |
| 2.2 Secondary Containment | Visible signs of leakage from tank into secondary containment | □Yes* □No | |
| 2.3 Surrounding soil | Visible signs of leakage | □Yes* □No □N/A | |
| 2.4 Interstice | Visible signs of leakage | □Yes* □No □N/A | |

| Item | Task | Status | Comments |
|---|---|---|---|
| **3.0 Tank Equipment** | | | |
| 3.1 Valves | a. Check for leaks. | ☐Yes* ☐No ☐N/A | |
| | b. Tank drain valves must be kept locked. | ☐Yes* ☐No ☐N/A | |
| 3.2 Spill containment boxes on fill pipe | a. Inspect for debris, residue, and water in the box and remove. | ☐Yes* ☐No ☐N/A | |
| | b. Drain valves must be operable and closed. | ☐Yes* ☐No ☐N/A | |
| 3.3 Liquid level equipment | a. Both visual and mechanical devices must be inspected for physical damage. | ☐Yes ☐No* ☐N/A | |
| | b. Check that the device is easily readable | ☐Yes ☐No* ☐N/A | |
| 3.4 Overfill equipment | a. If equipped with a "test" button, activate the audible horn or light to confirm operation. This could be battery powered. Replace the battery if needed | ☐Yes ☐No* ☐N/A | |
| | b. If overfill valve is equipped with a mechanical test mechanism, actuate the mechanism to confirm operation. | ☐Yes ☐No* ☐N/A | |
| 3.5 Piping connections | Check for leaks, corrosion and damage | ☐Yes* ☐No | |
| **4.0 Tank Attachments and Appurtenances** | | | |
| 4.1 Ladder and platform structure | Secure with no sign of severe corrosion or damage? | ☐Yes ☐No* ☐N/A | |
| **5.0 Other Conditions** | | | |
| 5.1 Are there other conditions that should be addressed for continued safe operation or that may affect the site spill prevention plan? | | ☐Yes* ☐No | |

**Additional Comments:**

# STI SP001 Portable Container Monthly Inspection Checklist

**General Inspection Information:**

Inspection Date: _____ Retain Until Date: _____ (36 months from inspection date)

Prior Inspection Date: _____ Inspector Name: _____

Containers Inspected (ID #'s): _____

## Inspection Guidance:

- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.



| Item | Area: _____ | | Area: _____ | | Area: _____ | | Area: _____ | |
|---|---|---|---|---|---|---|---|---|
| **1.0 AST Containment/Storage Area** | | | | | | | | |
| 1.1 ASTs within designated storage area? | ☐Yes | ☐No* | ☐Yes | ☐No* | ☐Yes | ☐No* | ☐Yes | ☐No* |
| 1.2 Debris, spills, or other fire hazards in containment or storage area? | ☐Yes* | ☐No | ☐Yes* | ☐No | ☐Yes* | ☐No | ☐Yes* | ☐No |
| 1.3 Water in outdoor secondary containment? | ☐Yes* | ☐No | ☐Yes* | ☐No | ☐Yes* | ☐No | ☐Yes* | ☐No |
| 1.4 Drain valves operable and in a closed position? | ☐Yes | ☐No* | ☐Yes* | ☐No | ☐Yes* | ☐No | ☐Yes* | ☐No |
| 1.5 Egress pathways clear and gates/doors operable? | ☐Yes | ☐No* | ☐Yes* | ☐No | ☐Yes* | ☐No | ☐Yes* | ☐No |

| Item | Area: _____ | Area: _____ | Area: _____ | Area: _____ |
|---|---|---|---|---|
| **2.0 Leak Detection** | | | | |
| 2.1 Visible signs of leakage around the container or storage area? | ☐Yes* ☐No | ☐Yes* ☐No | ☐Yes* ☐No | ☐Yes* ☐No |
| **3.0 Container** | | | | |
| 3.0 Noticeable container distortions, buckling, denting or bulging? | ☐Yes* ☐No | ☐Yes* ☐No | ☐Yes* ☐No | ☐Yes* ☐No |

**Comments:**

# STI SP001 Annual Inspection Checklist

**General Inspection Information:**

Inspection Date: _____ Retain Until Date: _____ (36 months from inspection date)

Prior Inspection Date: _____ Inspector Name: _____

Tanks Inspected (ID #'s): _____

## Inspection Guidance:

- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility must regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.
- Complete this checklist on an annual basis supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**



| Item | Task | Status | Comments |
|---|---|---|---|
| **1.0 Tank Containment** | | | |
| 1.1 Containment structure | Check for:<br>• Holes or cracks in containment wall or floor<br>• Washout<br>• Liner degradation<br>• Corrosion<br>• Leakage<br>• Paint failure<br>• Tank settling | ☐Yes* ☐No ☐N/A | |
| **2.0 Tank Foundation and Supports** | | | |
| 2.1 Foundation | Settlement or foundation washout? | ☐Yes* ☐No | |
| 2.2 Concrete pad or ring wall | Cracking or spalling? | ☐Yes* ☐No ☐N/A | |

| Item | Task | Status | Comments |
|---|---|---|---|
| 2.3 Supports | Check for corrosion, paint failure, etc. | □Yes* □No □N/A | |
| 2.4 Water drainage | Water drains away from tank? | □Yes □No* □N/A | |
| 2.5 Tank grounding | Strap secured and in good condition? | □Yes □No* □N/A | |
| **3.0 Cathodic Protection** | | | |
| 3.1 Gavlvanic cathodic protection system | Confirm system is functional, includes the wire connections for galvanic systems | □Yes □No* □N/A | |
| 3.2 Impressed current system | a. Inspect the operational components (power switch, meters, and alarms). | □Yes □No* □N/A | |
| | b. Record hour meter, ammeter and voltmeter readings. | □Yes □No* □N/A | |
| **4.0 Tank Shell, Heads, Roof** | | | |
| 4.1 Coating | Check for coating failure | □Yes* □No | |
| 4.2 Steel condition | Check for:<br>• Dents<br>• Buckling<br>• Bulging<br>• Corrosion<br>• Cracking | □Yes* □No | |
| 4.3 Roof slope | Check for low points and standing water | □Yes* □No □N/A | |
| **5.0 Tank Equipment** | | | |
| 5.1 Vents | Verify that components are moving freely and vent passageways are not obstructed for:<br>• Emergency vent covers<br>• Pressure/vacuum vent poppets<br>• Other moving vent components | □Yes* □No | |

| Item | Task | Status | Comments |
|---|---|---|---|
| 5.2 Valves | Check the condition of all valves for leaks, corrosion and damage. | □Yes* □No | |
| 5.2.1 Anti-siphon, check and gate valves | Cycle the valve open and closed and check for proper operation. | □Yes □No* □N/A | |
| 5.2.2 Pressure regulator valve | Check for proper operation. (Note that there may be small, 1/4 inch drain plugs in the bottom of the valve that are not visible by looking from above only) | □Yes □No* □N/A | |
| 5.2.3 Expansion relief valve | Check that the valve is in the proper orientation. (Note that fuel must be discharged back to the tank via a separate pipe or tubing.) | □Yes □No* □N/A | |
| 5.2.4 Solenoid valves | Cycle power to valve to check operation. (Electrical solenoids can be verified by listening to the plunger opening and closing. If no audible confirmation, the valve should be inspected for the presence and operation of the plunger.) | □Yes □No* □N/A | |
| 5.2.5 Fire and shear valves | a. Manually cycle the valve to ensure components are moving freely and that the valve handle or lever has clearance to allow valve to close completely. | □Yes □No* □N/A | |
| | b. Valves must not be wired in open position. | □Yes □No* □N/A | |

| Item | Task | Status | Comments |
|---|---|---|---|
| | c. Make sure fusible element is in place and correctly positioned. | □Yes □No* □N/A | |
| | d. Be sure test ports are sealed with plug after testing is complete and no temporary test fixture or component remains connected to valve. | □Yes □No* □N/A | |
| 5.3 Interstitial leak detection equipment | Check condition of equipment, including:<br>• The window is clean and clear in sight leak gauges.<br>• The wire connections of electronic gauges for tightness and corrosion<br>• Activate the test button, if applicable. | □Yes □No* □N/A | |
| 5.4 Spill containment boxes on fill pipe | a. If corrosion, damage, or wear has compromised the ability of the unit to perform spill containment functions, replace the unit. | □Yes* □No □N/A | |
| | b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. | □Yes* □No □N/A | |
| | c. Drain valves must be operable and closed | □Yes* □No □N/A | |
| 5.5 Strainer | a. Check that the strainer is clean and in good condition. | Yes □No* □N/A | |

| Item | Task | Status | Comments |
|---|---|---|---|
| 5.5 Strainer | b. Access strainer basket and check cap and gasket seal as well as bolts. | □Yes □No* □N/A | |
| 5.6 Filter | a. Check that the filter is in good condition and is within the manufacturer's expected service life. Replace, if necessary. | □Yes □No* □N/A | |
| | b. Check for leaks and decreased fuel flow | □Yes □No* □N/A | |
| 5.7 Flame arrestors | Follow manufacturer's instructions. Check for corrosion and blockage of air passages. | □Yes* □ No □N/A | |
| 5.8 Leak detector for submersible pump systems | Test according to manufacturer's instructions and authority having jurisdiction (AHJ). Verify leak detectors are suited and properly installed for aboveground use. | □Yes □No* □N/A | |
| 5.9 Liquid level equipment | a. Has equipment been tested to ensure proper operation? | □Yes □No* □N/A | |
| | b. Does equipment operate as required? | □Yes □No* □N/A | |
| | c. Follow manufacturer's instructions | □Yes □No* □N/A | |
| 5.10 Overfill equipment | a. Follow manufacturer's instructions and regulatory requirements for inspection and functionality verification. | □Yes □No* □N/A | |
| | b. Confirm device is suited for above ground use by the manufacturer | □Yes □No* □N/A | |

| Item | Task | Status | Comments |
|---|---|---|---|
| **6.0 Insulated Tanks** | | | |
| 6.1 Insulation | Check condition of insulation for:<br>• Missing sections<br>• Areas of moisture<br>• Mold<br>• Damage | □Yes* □ No □N/A | |
| 6.2 Insulation cover or jacket | Check for damage that will allow water intrusion | □Yes* No □N/A | |
| **7.0 Miscellaneous** | | | |
| 7.1 Electrical wiring and boxes | Are they in good condition? | □Yes □No* □N/A | |
| 7.2 Labels and tags | Ensure that all labels and tags are intact and readable. | □Yes □No* □N/A | |

**Additional Comments:**

## RAINWATER DISCHARGE REPORT FORM

| Date | Time | Depth of Water | Water Appearance | Person Conducting Discharge |
|---|---|---|---|---|
| | | | | |
| | | | | |
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**PERSONNEL TRAINING RECORD**
**SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN**
**ST. LOUIS COMPOSTING, INC.**
**VALLEY PARK, MISSOURI**

Description of Training _____

Instructor _____ Date _____

**EMPLOYEE NAMES**

| Printed Name | Signature |
| --- | --- |
| | |
| | |
| | |
| | |
| | |
| | |
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## APPENDIX B

### Discharge Reporting Forms

- Discharge Reporting Form
- Incident Report Form
- Regional Administrator Report

## DISCHARGE REPORTING FORM

1. Name of Facility: _____
2. Address of Facility: _____
3. Name of Person Reporting: _____
4. Phone Number of Person Reporting: _____
5. Exact Location of Spill/Release: _____
6. Type of Material Released: _____
7. Quantity of Material Released: _____
8. Source of Material Released: _____
9. Cause of Release: _____
10. Nearest Body of Water: _____
    i. Is Water Impacted? _____
    ii. Distance from the Site _____
11. Actions Taken to Contain and Cleanup: _____

    _____
12. Estimated Quantity Recovered: _____
13. Extent of Injuries (if any): _____
14. Time and Date of Incident: _____
15. Possible Hazards to Human Health or Environment: _____

    _____
16. Medical Precautions: _____

    _____

**INCIDENT REPORT FORM**
**ST. LOUIS COMPOSTING, INC.**
**VALLEY PARK, MISSOURI**

1. TIME PROBLEM DISCOVERED _____ DATE _____
2. TIME PROBLEM STOPPED _____ DATE _____
3. APPROXIMATE LOCATION AND TYPE OF ACCIDENT (E.G., FIRE, EXPLOSION, SPILL) _____
4. MATERIAL SPILLED _____
   APPROXIMATE AMOUNT _____
5. EXTENT OF INJURIES (IF ANY) _____
6. WHAT DAMAGE TO PEOPLE OR THE ENVIRONMENT IS LIKELY _____
7. ESTIMATED AMOUNT OF MATERIAL RECOVERED _____
8. WHAT WAS DONE WITH RECOVERED MATERIAL _____
9. ACTION TAKEN TO CONTROL THE PROBLEM AND PREVENT FURTHER PROBLEMS _____

SIGNATURE (DIVISION MGR.) _____
DATE _____

## Regional Administrator Report [112.4]

One Spill Greater Than 1,000 Gallons? ☐
Two Spills Each Greater Than 42 Gallons? ☐

Name of Facility_____
Name of Person Reporting Spill(s)_____
Location of Facility _____
_____
Maximum Storage Capacity of Facility_____
Normal Daily Throughput of Facility _____
Description of corrective action and countermeasures taken, including equipment repairs and replacements _____
_____
_____
_____
_____
Description of Facility (attach copies of Figures 1 and 2)_____
_____
_____
_____
Cause of the discharge and failure analysis _____
_____
_____
_____
_____
_____
Additional Preventive Measures Taken or Contemplated to Minimize Possibility of Recurrence _____
_____
_____
_____
_____

# APPENDIX C

## Emergency Contacts

## EMERGENCY REPORTING ROSTER

In the event of a release or any other emergency, this roster provides the names and telephone numbers of persons/agencies to be contacted. Any employee discovering a spill SHALL IMMEDIATELY notify the following St. Louis Composting Response Contacts, emergency response contacts, and local emergency response contractors, if needed:

St. Louis Composting Emergency Response Contacts:

| | |
|---|---|
| Tiffany Emmett | (636) 861-3344 (Office) |
| Safety and Compliance Manager*, SPCC Coord. | (636) 299-6022 (Mobile) |
| David Gavlick | (636) 861-3344 (Office) |
| Vice President of Operations, Asst. SPCC Coord. | (314) 575-7887 (Mobile) |

| Oil Spill Removal Organizations | | | |
|---|---|---|---|
| **Local and County** | | **Phone Number** | **Time Called** |
| **EMERGENCIES** | | 911 | |
| Fire Department | | (636) 225-4288 | |
| Police Department | | (636) 225-5252 | |
| St. Louis County Office of Emergency Management | | (314) 628-5400 | |
| **Organization/Contractor** | **Phone Number** | **Contact** | **Time Called** |
| | | | |
| | | | |
| **Federal** | | **Phone Number** | **Time Called** |
| National Response Center<br>Toxic Chemical and Oil Spill | | (800) 424-8802 | |
| U.S. EPA Region 7 | | (800) 223-0425<br>(913) 281-0991 | |
| U.S. Fish and Wildlife Service, Midwest Region | | (612) 713-5360 | |
| **State** | | **Phone Number** | **Time Called** |
| Missouri Department of Natural Resources (MDNR)<br>24-hour Environmental Emergency Response | | (573) 634-2436 | |
| MDNR St. Louis Regional Office | | (314) 416-2960 | |



**POST THESE PHONE NUMBERS BY ALL SITE TELEPHONES AND ASTs.**

# APPENDIX D

## Oil Transfer Procedures

**NOTICE TO ALL**
**TANK TRUCK DRIVERS**

Tank Truck Drivers

To prevent the release of substances hazardous to the environment, tank truck drivers entering this facility are to comply with the following rules.

1. Exercise caution when maneuvering to avoid damage to containment walls.

2. Inspect tank, fittings, and liquid level indicator prior to filling.

3. Place drip pans under all pump hose fittings or connections, if any, prior to unloading.

4. Remain with the vehicle at all times while loading/unloading.

5. Drain the loading/unloading lines to the storage tank, close the drain valves before disconnecting said lines, and make sure a drain pan or other appropriate containment device is located under all connections, if any.

6. Verify that all drain valves are closed before disconnecting loading/unloading lines.

7. Inspect the vehicle before departure to be sure all loading/unloading lines have been disconnected and all drain and vent valves are closed.

8. Immediately report any leakage or spillage, including quantity, to the Facility Emergency SPCC Coordinator(s) or other management personnel.



_____

Safety and Compliance Manager
St. Louis Composting, Inc.

# APPENDIX E

## Oil Release Response Procedures

## PETROLEUM RELEASE RESPONSE PROCEDURES

### 1. Discovery of a Release

The person discovering a release of material from a container, tank, or operating equipment should initiate certain actions immediately.

a. Extinguish any sources of ignition. Until the material is identified as nonflammable and non-combustible, all potential sources of ignition in the area should be removed. Vehicles should be removed. Vehicles should be turned off. If the ignition source is stationary, attempt to move spilled material away from the ignition source. Avoid sparks and movement creating static electricity.

b. Attempt to stop the release at its source. **Assure that no danger to human health exists first.** Simple procedures (turning valves, plugging leaks, etc.) may be attempted by the discoverer if there is no health or safety hazard and there is a reasonable certainty of the origin of the leak. All efforts to control leaks must be under the supervision of the SPCC Coordinator or Assistant SPCC Coordinator (This policy applies to the handling of petroleum-based products as described in this Plan). No St. Louis Composting, Inc. personnel shall come into contact with unknown or hazardous substances illegally brought into the facility.

c. Initiate Spill Notification and Reporting Procedures

i) Determine If Immediate Threat to Human Life Exists. If there is an immediate threat to human life (e.g. a fire in progress or fumes overcoming workers), an immediate alarm should be sounded to evacuate the building, and the fire department should be called. Request the assistance of the fire department's hazardous materials response team if an uncontrollable spill has occurred and/or if the spill has migrated beyond the St. Louis Composting, Inc. site boundaries.

ii) Report the incident immediately to the Supervisor and the SPCC Coordinator. The SPCC Coordinator will initiate notification procedures.

### 2. Containment of a Release

All of the materials at the facility can be safely contained within secondary containment structures if a release occurs. However, if material is released outside the containment areas, it is critical that the material is accurately identified and

appropriate control measures are taken in the safest possible manner. Consult the material's Safety Data Sheet (SDS) file on Hazard Information Center at the employees break room. MSDS' for petroleum products used at the facility are also referenced in Appendix G.

a. Attempt to stop the release at the source. If the source of the release has not been found, if special protective equipment is necessary to approach the release area, or if assistance is required to stop the release, the fire department should be called to halt the discharge at its source. St. Louis Composting, Inc. personnel should be available to guide the fire department's efforts.

b. Contain the material released into the environment. Following proper safety procedures, the spill should be contained by absorbent materials and dikes using shovels and brooms. Consult applicable material safety data sheets for material compatibility, safety, and environmental precautions.

c. Continue the notification procedure. The Coordinator shall perform immediate notification as appropriate. Obtain outside contractors to clean up the spill, if necessary.

d. Additionally, reference Initial Release Response Measures, 10 CSR 26-5.020 (7), located in Appendix I.

**3. Spill Cleanup**

Appropriate personal protective equipment and clean up procedures can be found on material safety data sheets. Care must be taken when cleaning up spills to minimize the generation of waste. The Regional Engineer's Office can provide assistance for the issues discussed below. The Regional Engineer must be made aware of all spill cleanups.

a. Recover or cleanup the material spilled. As much material as possible should be recovered and reused where appropriate. Material which cannot be reused must be declared waste. Liquids absorbed by solid materials shall be shoveled into open top, 55-gallon drums, or if the size of the spill warrants, into a roll-off container(s). When drums are filled after a cleanup, the drum lids shall be secured and the drums shall be appropriately labeled (or relabeled) identifying the substance(s), the date of the spill/cleanup, and the facility name and location. Combining non-compatible materials can cause potentially dangerous chemical and/or physical reactions or may severely limit disposal

options. Compatibility information can be found on material safety data sheets.

b. Cleanup of the spill area. Surfaces that are contaminated by the release shall be cleaned by the use of an appropriate substance or water. Cleanup water must be minimized, contained, and properly disposed. Occasionally, porous materials (such as wood, soil, or oil-dry) may be contaminated; such materials will require special handling for disposal.

c. Decontaminate tools and equipment used in cleanup. Even if dedicated to cleanup efforts, tools and equipment that have been used must be decontaminated before replacing them in the spill control kit.

**4. Post Cleanup Procedures**

a. Reports to outside agencies. The SPCC Coordinator shall determine if a reportable spill has occurred (see Section 5). A confirming written report shall be sent to all government agencies and emergency planning committees which received a verbal notification. Specific items which must be reported in writing to the Missouri Department of Natural Resources may be found in 10 CSR 26-5 provided in Appendix I.

If the facility has a single discharge greater than 1,000 gallons or two discharges each greater than 42 gallons in a 12-month period the information requested in the "Report to EPA Region VII Administrator" found in Appendix B must be submitted to the Regional Administrator within 60 days of the discharge(s). A copy of the information reported to the EPA Administrator must also be provided to the Missouri Department of Natural Resources. [112.4]

b. Arrange for proper disposal of any waste materials. The waste material from the cleanup must be characterized and approved for disposal by the Regional Engineer. Representative sampling and analysis may be necessary to make this determination. In any case, the SPCC Coordinator shall assure that the waste is transported and disposed of in compliance with applicable laws and regulations. When manifests are needed, the SPCC Coordinator shall see that they are prepared and, when appropriate, returned in the allotted time by the disposal site.

c. Determine if free product removal activities are required. Implement activities as needed. Refer to Free Product Removal, 10 CSR 26-5.020 (8), located in Appendix I.

d. Review the contingency and spill plans. Management and operating personnel shall review spill response efforts, notification procedures, and cleanup equipment usage to evaluate their adequacy during the episode. Where deficiencies are found, the plan shall be revised and amended.

## 5. Internal Report

Spills that are regulated per this Plan should be documented using the Incident Report Form (see Appendix B). The SPCC Coordinator shall prepare the report.

## 6. Communications

In case of a fire, spill, or other emergency, paging systems and two-way radios can be used to contact personnel. Telephones are located at the shop office and in the administration building.

## 7. Fire, Spill, and Safety Equipment

Portable fire extinguishers are located throughout the facility, well marked, and easily accessible. Records are kept on all fire equipment in service and regular testing is performed in accordance with established good procedures. A list of fire extinguishers, spill, and safety equipment that are available discussed in Section 6 of the SPCC Plan and locations of the fueling areas are shown on Figure 2.

## 8. Liaison with Local Authorities

Copies of this plan should be submitted to the local fire department, police department, and hospital as requested or needed by them. In addition, familiarization sessions shall be held with personnel from these organizations if requested by the organization. It is important that personnel responding to an emergency be familiar with chemicals used, the possibilities for releases of hazardous materials, and the location of the fire equipment such as fire extinguishers, etc.

# APPENDIX F

## Site Photographs


Figure 1: View of 200-gallon Waste Oil AST and secondary containment in the Lubricating station (facing south)

Figure 2: View of 517- gallon Diesel Fuel AST in the Wood Chip Grinding Area (facing south)

Figure 3: View of 560-gallon Diesel Fuel AST and generator in the Wood Chip Grinding Area. (facing north)

Figure 4: View of 102 CK80DM Generator with a 150-gallon diesel fuel tank in the Wood Chip Grinding Area. (facing north)

Figure 5: View of Grinder #512 with a 250-gallon diesel fuel tank in the Wood Chip Grinding Area (facing northeast)

Figure 6: View of the two 560-gallon diesel fuel ASTs at the fueling station. (facing east)

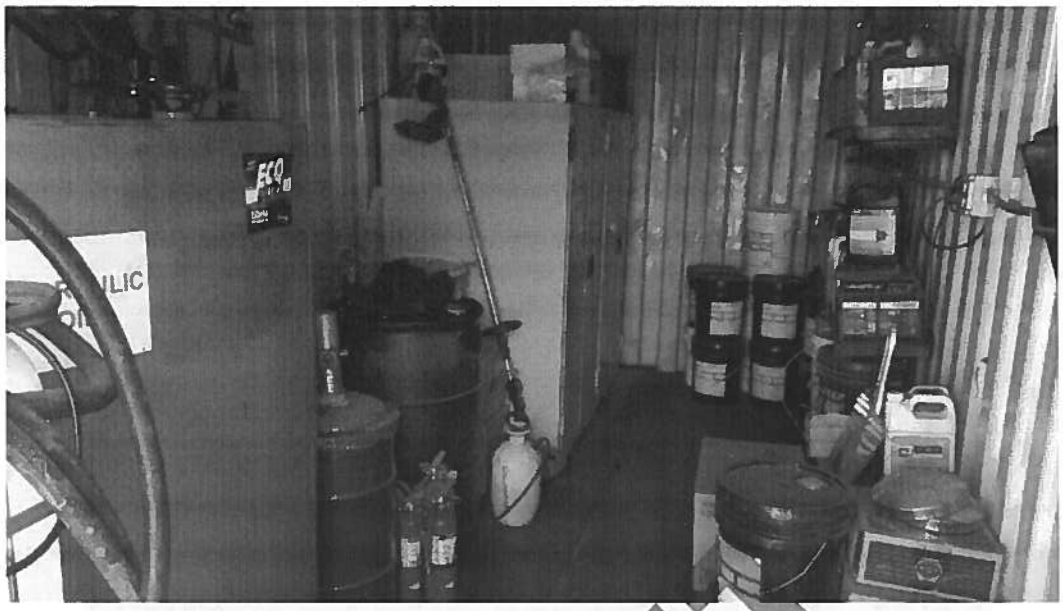


Figure 7: View of the contents of Storage Locker #3, including the 350-gallon hydraulic fluid AST (grey on left of image) (facing east)

Figure 8: View of the 175-gallon diesel fuel area in the Water Truck Area (facing northwest)


Figure 9: View of the 104 Cat Generator containing a 200-gallon fuel tank in the Colorant Area (facing southwest)



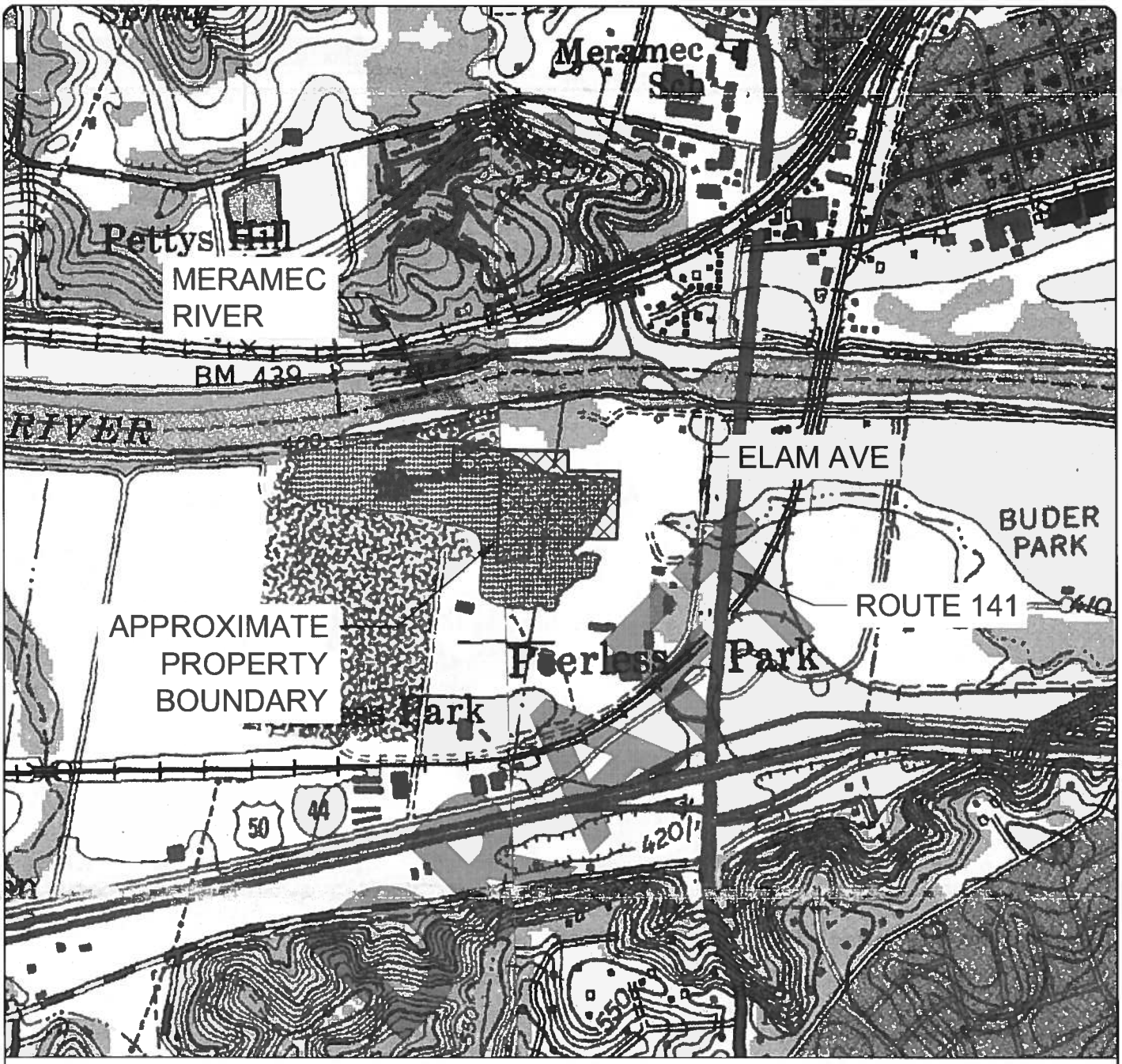
Figure 10: View of Grinder #513 containing a 250-gallon diesel fuel tank in the Composting, Processing, and Log Storage Area (facing northwest)


Figure 11: View of the McCloskey Trommel containing a 65-gallon fuel tank in the Composting, Processing, and Log Storage Area (facing west)

## APPENDIX G

### Figures

- Figure 1: Site Location
- Figure 2: Site Layout




NOTE: MAP IS THE 7.5 - MINUTE SERIES KIRKWOOD AND MANCHESTER QUADRANGLE FROM THE U.S. GEOLOGICAL SURVEY DATED 1993.

0 1,000 2,000

SCALE FEET

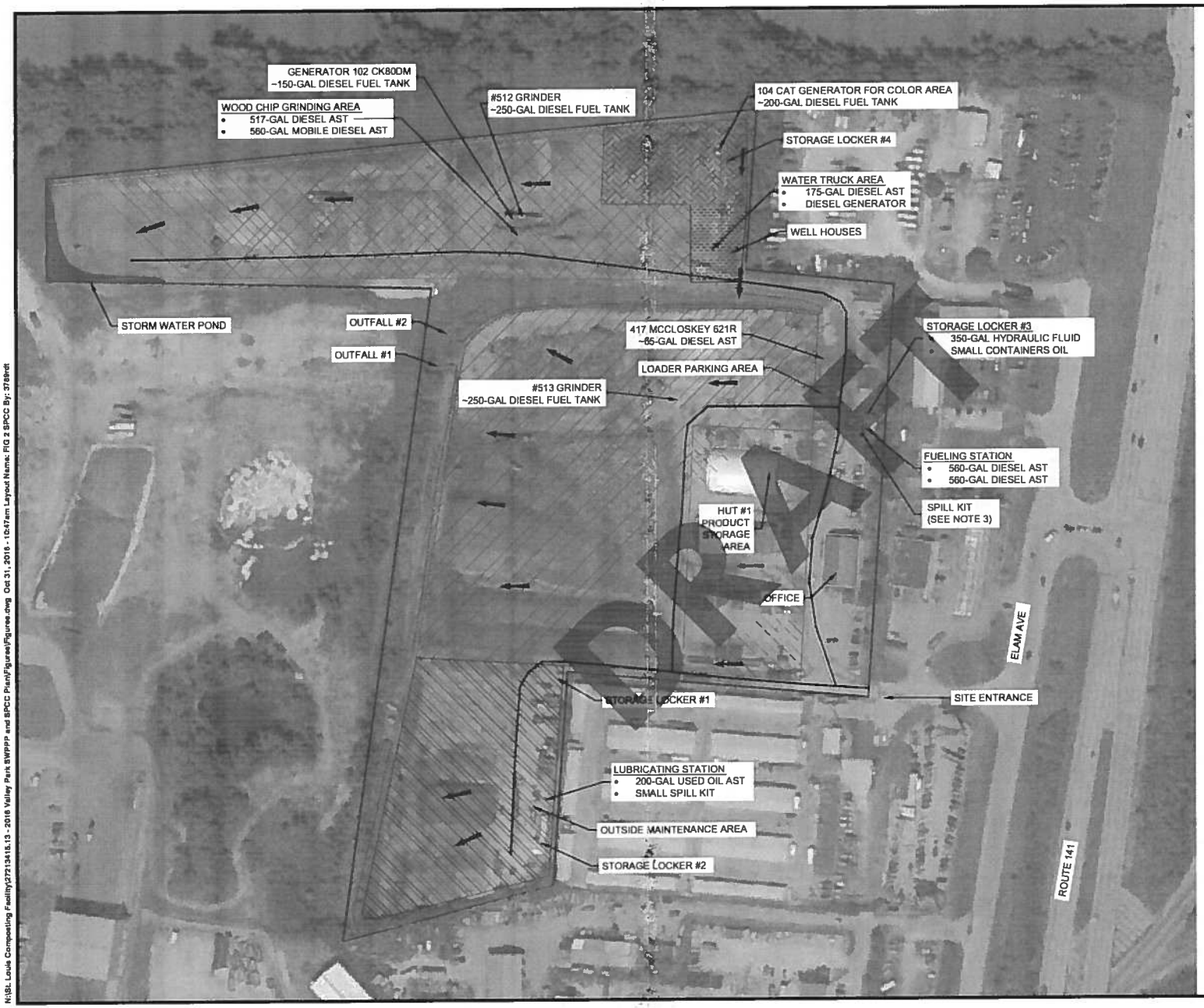

QUADRANGLE LOCATION

**SCS ENGINEERS**

13 Executive Drive, Suite 1
Fairview Heights, Illinois 62208
PH. (618) 628-2001 FAX. (618) 628-2002

**SITE LOCATION MAP**
**ST. LOUIS COMPOSTING**
**VALLEY PARK FACILITY**
**VALLEY PARK, MO**

| | | | |
|---|---|---|---|
| CHK. BY: TP | DWN. BY: ZDB | DSN. BY: ZDB | PROJ. NO. 27213075.13 |
| PROJ. MGR: TP | DATE: 4/21/16 | CADD FILE: FIGURES.DWG | FIGURE NO. 1 |




LEGEND:

- PROPERTY BOUNDARY
- WOOD CHIP GRINDING AREA
- COMPOSTING, PROCESSING AND LOG STORAGE AREA
- FINISHED PRODUCT AREA
- RETAIL AREA
- COLORANT AREA
- WATER TRUCK AREA
- HAUL ROAD
- OUTFALL
- SURFACE WATER FLOW
- CULVERT
- BUILDING
- DRAINAGE DITCH
- FILTER SOCK

NOTE:

1. FILTER SOCK LOCATIONS ARE APPROXIMATE.
2. FILTER SOCK CHECKS WILL BE PLACED IN DITCHES AS DISCUSSED IN THE SPCC PLAN AND FACILITY'S STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

0 150 300

SCALE FEET

| REV. | DATE | BY |
|---|---|---|
| | | |

SHEET TITLE: SITE LAYOUT

PROJECT TITLE: VALLEY PARK SPCC PLAN

CLIENT: ST. LOUIS COMPOSTING
VALLEY PARK FACILITY
39 OLD ELAM AVENUE, VALLEY PARK, MISSOURI

SCS ENGINEERS
7311 W. 130th St., Ste. 100
Overland Park, Kansas 66213
PH. (913) 681-0030 FAX (913) 681-0012

PROJ. NO. 27213075.13
DES. BY: ZDB
DRN. BY: ZDB
CHK. BY: TP
QA/QC BY: PT
PROJ. MGR: TP

CADD FILE:

DATE: 10/31/16

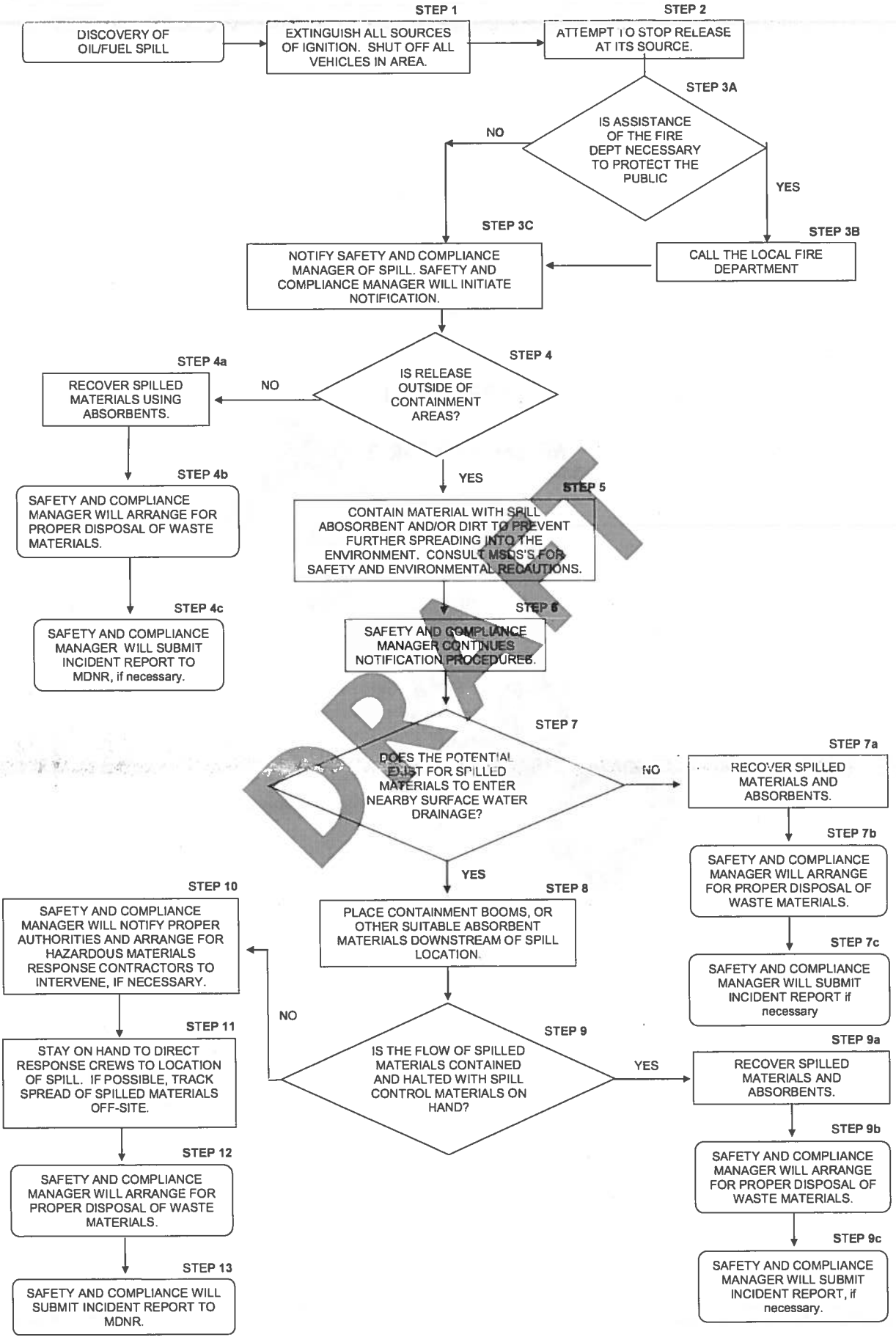
FIGURE 2 of 2

N:\St. Louis Composting Facility\27213415.13 - 2016 Valley Park SWPPP and SPCC Plan\Figures\Figure2.dwg Oct 31, 2016 - 10:47am Layout Name: FIG 2 SPCC By: 3788rdt

# APPENDIX H

## Spill Response Flowchart

# ST. LOUIS COMPOSTING SPILL RESPONSE FLOWCHART



# APPENDIX I

## Missouri 10 CSR 26-5

# Rules of
# Department of Natural Resources
## Division 26—Petroleum and Hazardous Substance Storage Tanks
## Chapter 5—Aboveground Storage Tanks—Release Response

## Title 10—DEPARTMENT OF NATURAL RESOURCES
### Division 26—Petroleum and Hazardous Substance Storage Tanks
### Chapter 5—Aboveground Storage Tanks—Release Response

### 10 CSR 26-5.010 Applicability and Definitions

*PURPOSE: The Missouri Clean Water Commission is responsible for adopting rules necessary to prevent, control, and abate potential discharge of contaminants to the waters of the state. Releases of petroleum and other regulated substances from aboveground storage tanks and associated piping, primarily from ASTs located at service stations, marinas, bulk plants, and fleet fueling facilities, have been documented throughout the state. While the applicable Department of Agriculture regulations focus on prevention of such releases, there are currently no specific requirements for release response measures that must be taken to protect the environment and the waters of the state. The commission has determined release response measures to be necessary because, once a release has occurred, the nature of the contaminants is such that, without appropriate release response measures, there is a substantial threat that the discharged contaminants will pollute the waters of the state. The intent of the release response measures required by the rules in this chapter is to prevent any discharged contaminants from polluting the waters of the state. This rule specifies which aboveground storage tanks must comply with the technical requirements set forth in this chapter and defines specific words used in this chapter so that the meaning of these terms, and their application in the rules of this chapter, is easily understood.*

(1) The requirements in this chapter apply to the owner or operator of any facility on which one (1) or more aboveground storage tanks (AST), as the term is defined in this rule, is located.

(2) "Aboveground storage tank (AST)" or "AST System" means any one (1) or a combination of tanks, including pipes connected thereto, used to contain an accumulation of regulated substances and the volume of which, including the volume of the aboveground pipes connected thereto, is more than ninety percent (90%) above the surface of the ground, and is utilized for the sale of products regulated by Chapter 414, RSMo. The term does not include those tanks listed below or aboveground storage tanks at petroleum pipeline terminals. The following are not considered aboveground storage tanks:

(A) Underground storage tanks (USTs) as defined in 319.100, RSMo;

(B) Farm or residential tanks, regardless of size, used for storing motor fuel for noncommercial purposes;

(C) Tanks used for storing heating oil for consumptive use on the premises where stored;

(D) Septic tanks;

(E) Pipeline facilities, including gathering lines, regulated under:

1. The federal Natural Gas Pipeline Safety Act of 1968 (P.L. 90-481), as amended; or

2. The federal Hazardous Liquid Pipeline Act of 1979 (P.L. 96-129), as amended;

(F) Pipeline facilities regulated under state laws comparable to the provisions of law referred to in subsection (E) of this section;

(G) Surface impoundments, pits, ponds, or lagoons;

(H) Storm water or waste water collection systems;

(I) Flow-through process tanks;

(J) Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;

(K) Storage tanks situated in an underground area, such as a basement, cellar, mineworking, drift, shaft, or tunnel, if the storage tank is situated upon or above the surface of the floor; and

(L) Transformers, circuit breakers, or other equipment or machinery that contain regulated substances for operational purposes.

(3) "Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

(4) "Department," unless otherwise stated, means the Missouri Department of Natural Resources.

(5) "Free product" refers to a regulated substance that is present as a non-aqueous phase liquid (for example, pools of regulated substances at the surface or perched in the subsurface on top of an impermeable rock stratum or on top of groundwater).

(6) "Pipe" or "piping" means a hollow cylinder or tubular conduit constructed of nonearthen materials.

(7) "Regulated substance" means:

(A) "Petroleum," which is crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit (60°F) and 14.7 pounds per square inch absolute); or

(B) Other substances stored and approved for use as an alternative motor vehicle fuel by the United States Environmental Protection Agency, the Missouri Department of Agriculture, or the Missouri Department of Natural Resources, including, but not limited to:

1. Nonpetroleum or petroleum/nonpetroleum blended fuels such as biomass fuels, soydiesel or other biodiesels;

2. Neat alcohols (such as ethanol or methanol);

3. Alcohol-blended fuels;

4. Innovative or advanced technology petroleum fuels that are liquid at standard conditions of temperature or pressure (sixty degrees Fahrenheit (60°F) and 14.7 pounds per square inch absolute).

(8) "Release" includes, but is not limited to, any spilling, leaking, emitting, discharging, escaping, leaching, or disposing of regulated substances from an AST onto the ground surface or into groundwater, surface water, or subsurface soils.

(A) A release is "confirmed," for purposes of the rules in this chapter, upon discovery or observation of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils.

(B) A release is "suspected," for purposes of the rules in this chapter, anytime there is any indication of the presence of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils. Factors indicating the presence of regulated substances in the environment include, but are not limited to, erratic behavior of dispensing equipment, unexplained loss of product, notification by a third party of a potential release, or some reason other than discovery or observation of environmental contamination.

(9) "Tank" is a stationary device designed to contain an accumulation of regulated substances and constructed of non-earthen materials (for example, concrete, steel, or fiberglass-reinforced plastic) that provide structural support.

*AUTHORITY: section 319.137, RSMo Supp. 2010, and section 644.026, RSMo 2000.* This rule originally filed as 10 CSR 20-15.010. Original rule filed Sept. 13, 2001, effective May 30, 2002. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011.*

**Original authority: 319.137, RSMo 1989, amended 1993, 1995, 2004; and 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995, 2000.*

**10 CSR 26-5.020 Release Reporting and Initial Release Response Measures**

*PURPOSE: The Missouri Clean Water Commission is responsible for adopting rules necessary to prevent, control, and abate potential discharge of contaminants to the waters of the state. Releases of petroleum and other regulated substances from aboveground storage tanks and associated piping, primarily from ASTs located at service stations, marinas, bulk plants, and fleet fueling facilities, have been documented throughout the state. While the applicable Department of Agriculture regulations focus on prevention of such releases, there are currently no specific requirements for release response measures that must be taken to protect the environment and the waters of the state. The commission has determined release response measures to be necessary because, once a release has occurred, the nature of the contaminants is such that, without appropriate release response measures, there is a substantial threat that the discharged contaminants will pollute the waters of the state. The intent of the release response measures required by the rules in this chapter is to prevent any discharged contaminants from polluting the waters of the state. Specifically, this rule establishes procedures for reporting suspected releases, responding to releases and the subsequent steps necessary to ensure that a release is properly investigated and cleaned up. This rule also describes the first steps that shall be taken to abate or stop the spread of contaminants, mitigate and determine the extent of the release, and requires spilled free product to be collected and removed from the environment immediately. The rule further establishes requirements for verification of a release, and for conducting off-site investigations following reported or suspected releases if off-site migration is suspected.*

(1) Reporting Releases and Suspected Releases. Unless otherwise provided in this rule, owners and operators of aboveground storage tanks (ASTs) shall report any suspected or confirmed release of a regulated substance to the Department of Natural Resources' Emergency Spill Line at (573) 634-2436 at the earliest practical moment within twenty-four (24) hours of discovery of the suspected or confirmed release. Immediately upon the discovery or observation of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils, the owner or operator shall complete the following:

(A) The initial release response measures described in section (7) of this rule;

(B) If necessary, the free product recovery measures described in section (8) of this rule.

(2) System Test. For any suspected release that has not been confirmed by discovery or observation of regulated substances on the ground surface or in groundwater, surface water, or subsurface soils, the owner or operator of the AST shall take measures as necessary to determine whether a leak exists in either any portion of the tank or piping that routinely contains product or in the attached delivery piping, or in both. Measures that satisfy this requirement include, but are not limited to, hydrostatic testing of the AST system in accordance with API Standard 650, F-4 to F-7.6, air testing of the AST system, or a visual inspection of the tank bottom.

(A) Upon confirmation of a release, the owner or operator of the AST shall initiate the initial release response actions described in section (7) of this rule.

(B) If it is determined that no release has occurred, and there is no other indication of regulated substances on the ground surface or in groundwater, surface water, or subsurface soil, further investigation is not required.

(3) Exceptions. Following are exceptions to the requirement to report any suspected or confirmed release of a regulated substance to the environment.

(A) No further action is necessary for any release or spill of twenty-five (25) gallons or less, provided the release or spill is immediately contained and cleaned up.

(B) No further action is necessary for any release or spill that is completely contained within secondary containment structures, provided the secondary containment structure is functionally liquid-tight, and has the ability to contain any released product until the release or spill is cleaned up.

(4) Presumption of Release. A release is presumed upon discovery or observation by any person of the presence of regulated substances on the ground surface or in groundwater, surface water, or subsurface soil, or any indication that a release to the environment has occurred at the AST site or in the surrounding area. Examples include the presence of free product or vapors in soils, basements, sewer lines, utility lines, and nearby surface or drinking water.

(5) Investigation Due To Off-Site Impacts. The department may require an owner or operator of an AST to measure for the presence of contamination as described in subsection (7)(E) of this rule when, in the judgment of the department, it is necessary to establish whether an AST is the source of off-site contamination. The department's judgment shall be based upon documented physical evidence of a release at the AST site, including, but not limited to, the discovery of free product or vapors in soils, basements, sewer lines, utility lines, or nearby surface waters or drinking water supplies.

(6) Investigation Due to Closure.

(A) Upon closure of an AST in accordance with applicable rules of the Department of Agriculture, the department may require an owner or operator of an AST to measure for the presence of contamination as described in subsection (7)(E) of this rule when, in the judgment of the department, it is necessary to establish whether there has previously been a release at the former AST site or to establish whether potential contamination from any buried piping left in place poses a current or potential threat to cause pollution to waters of the state. The department's judgment shall be based upon documented physical evidence of a release at the AST site, including, but not limited to, the discovery of free product or vapors in soils, basements, sewer lines, utility lines, or nearby surface waters or drinking water supplies.

(B) The department may require the owner or operator of an AST permanently closed prior to the effective date of this rule to measure for the presence of contamination at the former tank site if, in the judgment of the department, releases from the AST and/or its buried piping pose a current or potential threat to cause pollution to the waters of the state. The department's judgment shall be based upon documented physical evidence of a release at the former AST site, including, but not limited to, the discovery of free product or vapors in soils, basements, sewer lines, utility lines, or nearby surface waters or drinking water supplies.

(7) Initial Release Response Measures. Owners or operators of ASTs shall:

(A) Remove as much of the regulated substances from the AST as is necessary to prevent further release to the environment;

(B) Visually inspect any released substances and prevent further migration of the release into surrounding soils and groundwater;

(C) Monitor and mitigate any environmental hazards posed by vapors or free product that have migrated from the AST site and entered subsurface structures such as sewers, basements, or subsurface utility conduits or trenches;

(D) Remedy hazards posed by excavated or exposed contaminated soils that result from

initial release response activities. Any treatment or disposal of contaminated soils shall be in compliance with applicable state and local requirements;

(E) Collect and analyze at least one (1) soil or groundwater sample as necessary to establish the presence of contamination. The sample(s) must be collected in a location where contamination is most likely to be present at the AST site. In selecting the location of the sample(s), the owner or operator shall consider the nature of the stored substance, the type of backfill around the release if outside the secondary containment, or the secondary containment if the secondary containment is not constructed of impermeable material, depth to groundwater, and all other factors appropriate for identifying the presence and source of the release; and

(F) Investigate the site to determine whether free product is present. If free product is present, then free product removal activities shall begin immediately.

(8) Free Product Removal. The owner or operator of the AST shall immediately remove as much free product as practicable. Any actions initiated or required under this section shall be continued until the department determines otherwise, except that changes to free product recovery effects may be instituted without prior approval provided that the department is notified in writing of the intended changes at least five (5) days in advance of the proposed implementation date. The department may modify or deny the request as necessary. Upon discovery of free product, the owner or operator shall, at a minimum:

(A) Remove free product to minimize the spread of contamination into previously uncontaminated zones. The recovery and disposal techniques shall be appropriate to the hydrogeologic conditions at the site. Recovered by-products shall be treated, discharged, or disposed of in compliance with applicable local, state, and federal regulations;

(B) Use abatement of free product migration as a minimum objective for free product removal;

(C) Handle all flammable products and/or wastes in a safe manner to prevent fires or explosions;

(D) Include information about free product recovery in the report submitted to the department, as required by section (9) of this rule. The report shall provide at least the following information:

1. The name of the person(s) responsible for implementing the free product removal measures;

2. The estimated quantity, type and thickness of free product observed or measured in wells, boreholes, and excavations;

3. The type of free product recovery system used;

4. Whether any discharge will take place on-site or off-site during the recovery operation and the location of this discharge;

5. The type of treatment applied to, and the effluent quality expected from, any discharge;

6. The steps that have been or are being taken to obtain necessary permits for any discharge;

7. The quantity and disposition of the recovered free product; and

8. The location and the appearance of the free product; and

(E) Upon completion of the activities required by this section, the owner or operator of the AST shall continue with the initial release response measures described in section (7) of this rule.

(9) Written Report. The owner or operator of the AST shall submit a written report on all activities required by this rule to the department within thirty (30) days of the date of discovery of the release. The report shall demonstrate compliance with all applicable requirements of this rule. Upon request, the department may allow another reasonable period of time for submission of the report. Upon review of this report, the department will determine whether the owner or operator must conduct a site characterization, as described in 10 CSR 26-5.030. If, in the judgment of the department, the information in the report is insufficient to adequately make this determination, the department may request additional information.

*AUTHORITY: section 319.137, RSMo Supp. 2010, and section 644.026, RSMo 2000.* This rule originally filed as 10 CSR 20-15.020. Original rule filed Sept. 13, 2001, effective May 30, 2002. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011.*

**Original authority: 319.137, RSMo 1989, amended 1993, 1995, 2004; and 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995, 2000.*

**10 CSR 26-5.030 Site Characterization and Corrective Action**

*PURPOSE: The Missouri Clean Water Commission is responsible for adopting rules necessary to prevent, control, and abate potential discharge of contaminants to the waters of the state. Releases of petroleum and other regulated substances from aboveground storage tanks and associated piping, primarily from ASTs located at service stations, marinas, bulk plants, and fleet fueling facilities, have been documented throughout the state. While the applicable Department of Agriculture regulations focus on prevention of such releases, there are currently no specific requirements for release response measures that must be taken to protect the environment and the waters of the state. The commission has determined release response measures to be necessary because, once a release has occurred, the nature of the contaminants is such that, without appropriate release response measures, there is a substantial threat that the discharged contaminants will pollute the waters of the state. The intent of the release response measures required by the rules in this chapter is to prevent any discharged contaminants from polluting the waters of the state. Further, this rule specifies the procedures for soil and groundwater investigations or characterization of the release at the site, and lists the requirements for corrective action plans for cleanup of releases from aboveground storage tank sites. In addition, this rule specifies the type of information required to be submitted by the owner or operator to the department, upon completion of these phases of activities.*

(1) Site Characterization.

(A) At the request of the department in response to a release, the owner or operator of an AST shall conduct a site characterization to include a full investigation of the release, the release site, and the surrounding area to determine the full extent and location of soils contaminated by the release and the presence and concentrations of contamination in the groundwater if the Initial Release Response Report submitted in compliance with 10 CSR 26-5.020 documents any of the following:

1. Contaminated groundwater or surface water above action levels;

2. Contaminated soils above action levels;

3. Presence of free product; or

4. Some other characteristic determined by the department to require further investigation because of its potential to result in pollution of the waters of the state or a potential threat to human health and the environment.

(B) An owner or operator of an AST shall follow a written procedure for conducting the site characterization of the release site. The department's Site Characterization Guidance Document may be used as a written procedure. Other written procedures may be used with prior written approval from the department.

(2) Site Characterization Reporting. A site characterization shall include, at a minimum, information about the site and the nature of the release. The site characterization report containing this information shall be submitted to the department within forty-five (45) days of date of the department's request to conduct site characterization in subsection (1)(A) of this rule. The department may approve an alternative reporting schedule. This information shall include, but is not limited to, the following:

(A) Data regarding the type of product released and an estimate of the quantity;

(B) Data from available sources or site investigations concerning the following factors:

1. Surrounding land use;

2. The hydrogeologic characteristics of the site and the surrounding area;

3. Use and approximate locations of wells affected or potentially affected by the release;

4. Surface and subsurface soil conditions at the site and the immediate surrounding area;

5. Locations of subsurface utilities;

6. The proximity, quality, and current and potential future uses of nearby surface and groundwater;

7. The potential effects of residual contamination on nearby surface and groundwater; and

8. Any additional relevant information assembled while carrying out the steps required in 10 CSR 26-5.020 and this rule.

(3) Corrective Action. Based upon the results of the site characterization, the owner or operator of the AST may be required to submit to the department a plan for corrective action that provides for adequate protection of human health and the environment, as determined by the department. The owner or operator of the AST shall modify the plan as necessary to meet this standard.

(A) If a plan is required, the owner or operator shall submit the plan within forty-five (45) days or according to a schedule and format established by the department.

(B) Even if not requested by the department, an owner or operator of an AST may elect to submit a corrective action plan.

(C) Once a plan has been submitted, the department will review the corrective action plan to ensure that implementation of the plan will adequately protect human health and the environment. In making this determination, the department will consider the factors listed in subsection (2)(B) of this rule.

(D) Upon written approval of the plan, or as directed by the department, the owner or operator of the AST shall implement the plan, including any modifications to the plan made by the department. The owner or operator shall evaluate and report the results of implementing the plan in accordance with a schedule and in a format established by the department.

(E) An owner or operator of an AST may begin remediation of soil and groundwater prior to approval of the corrective action plan provided they:

1. Notify the department in writing of their intention to begin cleanup;

2. Comply with any conditions imposed by the department, including cessation of remedial activities or mitigation of adverse consequences from cleanup activities; and

3. Incorporate all self-initiated remedial measures into the corrective action plan submitted to the department for approval.

(F) An owner or operator of an AST shall follow a written procedure for establishing a corrective action plan. The department's Corrective Action Guidance Document may be used as a written procedure. Other written procedures may be used with prior written approval from the department.

*AUTHORITY: section 319.137, RSMo Supp. 2010, and section 644.026, RSMo 2000.* This rule originally filed as 10 CSR 20-15.030. Original rule filed Sept. 13, 2001, effective May 30, 2002. Moved and amended: Filed April 15, 2011, effective Dec. 30, 2011.*

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